

Title (en)
METHOD AND PLANT FOR CO2 CAPTURE

Title (de)
VERFAHREN UND ANLAGE ZUR CO2-ABSCHEIDUNG

Title (fr)
PROCÉDÉ ET INSTALLATION DE CAPTURE DE CO2

Publication
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Application
EP 16762779 A 20160906

Priority
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• EP 2016070974 W 20160906

Abstract (en)
[origin: WO2017042163A1] A method and plant for capturing CO2 from a CO2containing exhaust gas (1), where the exhaust gas is compressed (10) and thereafter cooled (13, 15, 22) before the exhaust gas is introduced into an absorber (30), where the exhaust gas is brought in counter-current flow with an aqueous CO2absorbent solution (49), to give a lean exhaust gas (31) that is withdrawn from the absorber (30), reheated (22, 13) against incoming compressed exhaust gas, and thereafter expanded (34) and released into the atmosphere (4), where the aqueous CO2absorbent solution is an aqueous potassium carbonate solution, and that the steam and CO2withdrawn from the regenerator (40) is cooled in a direct contact cooler (61) by counter-current flow of cooling water (62), to generate a gaseous flow (70) of cooled CO2 and steam that is withdrawn for compression and drying of the CO2, and a liquid flow (64) of cooling water and condensed steam that is withdrawn and flashed (80), to give a cooled liquid phase (84) that is recycled as cooling water for the direct contact cooler (61) for the withdrawn CO2 and steam, and a gaseous phase (81) that is compressed (82) and thus heated, and introduced into the regenerator (40) as stripping steam (83).

IPC 8 full level
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